WHAT IS CLAIMED IS:

1. A method of cooling an optical transceiver that is mountable in a wall opening, said method comprising the steps of:

providing an optical transceiver having at least one end portion that is insertable within the wall opening; and,

ventilating ambient air over a major surface portion of the optical transceiver by mounting the one end portion to the wall opening so that at least one vent is formed within confines of the wall opening which allows air to pass therethrough and over the major surface portion of the optical transceiver.

2. The method of cooling as set forth in claim 1 further comprising the step of: shielding the optical transceiver, the vent, and the wall opening from electromagnetic interference.

3. The method of cooling as set forth in claim 2 further comprising the steps of: providing the optical transceiver with at least one connector port at the one end portion and providing the vent adjacent to and at least partially surrounding the connector port.

4. The method of cooling as set forth in claim 3 wherein said shielding step further comprises placing an electromagnetic screen assembly adjacent to and covering the vent.

5. A method of cooling a data transfer system in combination with an optical transceiver wherein the system includes a wall having a wall opening therein; said method includes the steps of:

providing an optical transceiver having at least one end portion that is insertable within the wall opening; and,

ventilating ambient air over a major surface portion of the optical transceiver by mounting the one end portion to the wall opening so that at least one vent is formed within confines of the wall opening which allows air to pass therethrough and over the transceiver, whereby the transceiver and internals of the data transfer system are cooled.

6. The method of cooling as set forth in claim 5 further comprising the step of:

shielding the optical transceiver end portion, the vent, and the wall opening from electromagnetic interference.

7. The method of cooling as set forth in claim 6 wherein said shielding step further comprises the step of placing an electromagnetic interference screen assembly adjacent to and covering the vent.

8. A method of cooling a data transfer system in combination with an optical transceiver wherein the system includes a wall having a wall opening therein; said method includes the steps of:

providing an optical transceiver having at least one end portion that is insertable within the wall opening;

ventilating ambient air over a major surface portion of the optical transceiver by mounting the one end portion to the wall opening so that at least one vent is formed within confines of the wall opening which allows air to pass therethrough and over the transceiver;

shielding the optical transceiver end portion, the vent, and the wall opening from electromagnetic interference; said shielding step further comprises the step of placing an electromagnetic screen assembly adjacent to and covering the vent; and,

providing the optical transceiver with at least one connector port at the one end portion and providing the vent to be adjacent to and at least partially surrounding the connector port.

9. An optical transceiver comprising:

a housing assembly including a carrier member and a heat sink cover member coupled to a portion of said carrier member to define at least a portion of an enclosure therewith;

an optical subassembly including an electro-optical transmitter unit positioned within said enclosure;

a retainer assembly mounted on a first end portion of said carrier member and enclosing portions of said optical subassembly;

said retainer assembly including a first set of structures which, in combination, with said carrier member define at least one electrical connector port for allowing connection of an electrical connector to said optical subassembly;

said retainer assembly including a second set of structures which, in combination, with said carrier member define at least

one vent surrounding portions of said connector port, said vent allows bidirectional passage of air therethrough, whereby air can easily pass generally over a substantial surface portion of said housing assembly; and,

an electromagnetic interference assembly connected to at least peripheral portions of said second set of structures and at least peripheral portions of said first end portion for releasably coupling said optical transceiver to an opening of a wall.

10. The optical transceiver of claim 9 wherein said electromagnetic interference assembly includes a frame having a plurality of spaced apart and flexibly resilient retaining tabs extending therefrom, said tabs allowing said optical transceiver to be inserted into a wall opening and releasably retained thereby with a wall defining the wall opening, said electromagnetic interference assembly is made of an electrically conductive material which reduces electromagnetic interference emissions of said optical transceiver.

11. The optical transceiver of claim 10 further including a screen assembly coupled to said optical transceiver so as to be positioned adjacent to and covering at least a portion of said vent, said screen assembly being made of a material that reduces electromagnetic interference and is coupled to said frame and is adapted to be positioned adjacent to and covering at least a portion of said vent defined by the optical transceiver and the wall, said screen assembly having a plurality of screen openings for allowing passage of air therethrough and reducing emission of electromagnetic interference.

12. The optical transceiver of claim 11 wherein said screen openings are sized and spaced for controlling electromagnetic interference emissions and for allowing air flow to said vent.

13. The optical transceiver of claim 11 wherein said screen assembly is integrally coupled to said frame in a flexibly resilient manner and is biased in a given angular orientation thereto so that said screen assembly presents relatively more of said openings to said vent than would otherwise be presented if said openings were in a plane parallel to said vent.

14. The optical transceiver of claim 9 further including a plurality of heat dissipating elements extending from said heat sink cover member, said heat dissipating elements being spaced apart from each other by a sufficient distance so as to minimize trapping of airborne debris thereby.

15. The optical transceiver of claim 9 wherein said second set of structures include a pair of laterally extending arms which cooperate with said carrier member to define a corresponding pair of lateral vents positioned adjacent said connector port and at least an upper vent above said connector port between said lateral vents.

16. The optical transceiver of claim 9 wherein said electro-optical transmitter unit includes a first electronic device which operates at a first temperature range and a second electronic device which operates at a second temperature range that is different from said first range; said first electronic device

being thermally coupled to an internal surface of said carrier member so as to transfer heat thereof by conduction to said carrier member, and said second electronic device being mounted on a substrate located within said enclosure which substrate is not in direct thermal contact with said carrier member; and, a thermally conductive unit coupling said second electronic device to an internal wall of said heat sink cover member in a manner so as to transfer heat by conduction from said second electronic device to said heat sink cover member and away from said first electronic device.

17. A data transfer system including a wall having an access opening and an adapter card assembly, in combination with an optical transceiver which is mounted to said wall access opening, said optical transceiver comprising: a housing assembly including a carrier member and a heat sink cover member coupled to a portion of said carrier member to define at least a portion of an enclosure therewith; an optical subassembly including an electro-optical transmitter unit positioned within said enclosure; a retainer assembly mounted on a first end portion of said carrier member and enclosing portions of said optical subassembly; said retainer assembly including a first set of structures which, in combination, with said carrier member define at least one electrical connector port for allowing connection of an electrical connector to said optical subassembly; said retainer assembly including a second set of structures which, in combination, with said carrier member define at least one vent surrounding portions of said connector port, said vent allows bidirectional passage of air therethrough, whereby air can easily pass generally over a substantial surface portion of said housing

assembly; and, a electromagnetic interference assembly connected to at least peripheral portions of said second set of structures and at least peripheral portions of said first end portion for releasably coupling said optical transceiver to the access opening.

18. The system of claim 17 wherein said electromagnetic interference assembly includes a frame having a plurality of spaced apart and flexibly resilient retaining tabs extending therefrom, said tabs allowing said optical transceiver to be inserted into the access opening and releasably retained thereby with the wall, said electromagnetic interference assembly is made of an electrically conductive material which reduces electromagnetic interference emissions of said optical transceiver.

19. The system of claim 18 further including an electrically conductive screen assembly coupled to said frame positioned adjacent to and cover at least a portion of said vent.

20. The system of claim 17 further including a plurality of heat dissipating elements extending from said heat sink cover member, said heat sink dissipating elements being spaced apart from each other by a sufficient distance so as to minimize trapping of airborne debris thereby.

21. An optical transceiver comprising:

a housing assembly including a carrier member and a heat sink cover member joined together to define a portion of an enclosure therebetween;

an optical subassembly within said enclosure, said optical subassembly comprising an electro-optical transmitter unit including a first electronic device which operates at a first temperature range and a second electronic device which operates at a second temperature range that is higher than the first temperature range;

said first electronic device being thermally coupled to an internal surface of said carrier member so as to transfer heat thereof by conduction to said carrier member, and said second electronic device being mounted on a substrate located within said enclosure which substrate is not in direct thermal contact with said carrier member; and,

a thermally conductive unit coupling said second electronic device to an internal wall of said heat sink cover member in a manner so as to transfer heat by conduction from said second electronic device to said heat sink cover member and away from said first electronic device, whereby the first electronic device is maintained cooler than the second electronic device.

22. The optical transceiver of claim 21 further comprising:

a retainer assembly mounted on a first end portion of said carrier member and enclosing portions of said optical subassembly;

said retainer assembly including a first set of structures which, in combination, with said carrier member define at least one electrical connector port for allowing connection of an electrical connector to said optical subassembly;

said retainer assembly including a second set of structures

which, in combination, with said carrier member define at least one vent surrounding portions of said connector port, said vent allows bidirectional passage of air therethrough, whereby air can easily pass generally over a substantial surface portion of said housing assembly; and,

an electromagnetic interference assembly connected to at least peripheral portions of said second set of structures and at least peripheral portions of said first end portion for releasably coupling said optical transceiver to an opening of a wall.

23. The optical transceiver of claim 22 wherein said thermally conductive unit comprises a thermally conductive adhesive material which has reduced electrical conductivity properties for inhibiting the transfer of electromagnetic interference.

24. The optical transceiver of claim 22 wherein said electromagnetic interference assembly is made of an electrically conductive material which reduces electromagnetic interference emissions of said optical transceiver and includes a frame having a plurality of spaced apart and flexibly resilient retaining tabs extending therefrom, said tabs allowing said optical transceiver to be inserted into a wall opening and releasably retained thereby with a wall defining the wall opening.

25. The optical transceiver of claim 22 further including an electrically conductive screen assembly coupled to said optical transceiver positioned adjacent to and covering at least

a portion of said vent.

26. An optical transceiver comprising:

a housing assembly including a carrier member and a heat sink cover member joined together to define a portion of an enclosure therebetween;

an optical subassembly within said enclosure, said optical subassembly comprising an electro-optical transmitter unit including a laser diode which operates at a first temperature range and a laser driver which operates at a second temperature range that is different from said first range;

said laser diode being thermally coupled to an internal surface of said carrier member so as to transfer heat thereof by conduction to said carrier member, and said laser driver being mounted on a substrate located within said enclosure which substrate is not in direct thermal contact with said carrier member; and,

a thermally conductive unit coupling said laser driver to an internal wall of said heat sink cover member in a manner so as to transfer heat by conduction from said laser driver to said heat sink cover member and away from said laser diode, whereby the laser diode is maintained cooler than the laser driver.

27. A method of selectively cooling components of an optical transceiver, said method comprising the steps of:

providing a housing assembly including a carrier member and a heat sink cover member joined together to define a portion of an enclosure therebetween;

providing an optical subassembly within the enclosure, wherein the optical subassembly comprises an electro-optical

transmitter unit including a first electronic device which operates at a first temperature range and a second electronic device which operates at a second temperature range that is higher than the first temperature range;

thermally coupling the first electronic device to an internal surface of the carrier member so as to transfer heat thereof by conduction to the carrier member,

mounting the second electronic device on a substrate located within the enclosure which substrate is not in direct thermal contact with the carrier member; and,

thermally coupling the second electronic device by a thermally conductive unit to an internal wall of the heat sink cover member in a manner so as to transfer heat by conduction from the second electronic device to the heat sink cover member and away from the first electronic device, whereby the first electronic device is maintained to be cooler than the second electronic device.

28. The method of claim 27 wherein said step of providing a thermally conductive unit further comprises the step of providing a thermally conductive adhesive material which has reduced electrical conductivity properties for inhibiting the transfer of electromagnetic interference.

29. An electromagnetic interference apparatus for use in combination with an optical transceiver having a housing assembly including an end portion with a vent which allows air to flow therethrough, said electromagnetic interference apparatus is made of a material which reduces electromagnetic interference emissions, said electromagnetic interference apparatus

comprising:

a frame;

a plurality of spaced apart and flexibly resilient retaining tabs extending from said frame, said tabs allowing the optical transceiver to be inserted into a wall opening for releasably retaining the optical transceiver within the wall opening; and,

a screen assembly coupled to said frame so as to be positioned adjacent to and covering at least a portion of the vent, said screen assembly including a plurality of screen openings which allow passage of air therethrough and reduce emissions of electromagnetic interference.

30. The apparatus of claim 29 wherein said screen assembly is angularly oriented relative to a generally longitudinal flow path of air through the vent so as to increase the number of said screen openings which can pass air therethrough relative to a number of said screen openings which could pass air if said screen openings were generally parallel to a vertical plane of said vent.